

Recent IBM Patents

The following patents were issued by the countries in which the inventions were made.

France		
7,006,052	Data Transmission System	<i>A. Croisier</i>
Germany		
MR00512	Door Controller SE81	<i>K. Zaiser</i>
Netherlands		
0,132,751	Looping Document Stacker	<i>R. Eichelsheim</i>
Sweden		
0,336,066	Process Control Device	<i>A. Rullgård</i>
Switzerland		
0,514,268	Method of Time Division Multiplex Communication and Switching Unit for a System to Operate this Method	<i>F. H. Closs, H. R. Mueller, E. Port, H. Rudin, Jr., and D. Wild</i>
United Kingdom		
1,230,834	Character Form Recognition	<i>A. Dubinsky and P. J. Titman</i>
1,231,908	Associative Store	<i>J. A. Arulpragasam, R. J. Llewelyn, J. F. Minshull, and L. Perry</i>
1,233,290	Electronic Digital Data Stores	<i>P. L. Gardner, R. J. Llewelyn, and R. Waugh</i>
1,233,484	Data Storage System	<i>J. A. Arulpragasam, M. H. Hallett, J. F. Minshull, A. S. Murphy, and T. E. Robinson</i>
1,234,484	Data Processing System	<i>R. J. Llewelyn and J. F. Minshull</i>
1,237,016	Recording Head Loading Mechanism	<i>D. J. Cresswell, J. D. Lipscombe, and L. J. Rigbey</i>
United States		
3,602,940	Magnetic Recording Tape Cleaner	<i>R. A. Barbeau and E. J. Wroblewski</i>
3,603,284	Vapor Deposition Apparatus	<i>R. R. Garnache</i>
3,603,646	Semiconductor Wafer Air Slide with Controlled Wafer Motion	<i>A. Leoff</i>
3,603,776	Binary Batch Adder Utilizing Threshold Counters	<i>A. Weinberger</i>
3,603,801	Electro-optic Information Read-out Device Using Polarized Laser Light ...	<i>T. J. Harris, K. M. Kosanke, W. W. Kulcke, and E. Max</i>
3,603,820	Bistable Device Storage Cell	<i>C. H. Schuenemann</i>
3,603,897	Pulse Circuit Employing Delay Line to Delimit Output Frequency	<i>S. J. Grubel, J. E. LaRou, and H. R. Stirling</i>
3,603,934	Data Processing System Capable of Operation Despite a Malfunction	<i>H. F. Heath, Jr. and S. S. Husson</i>
3,603,936	Microprogrammed Data Processing System	<i>D. P. Attwood, D. M. Syme, and H. W. Tuffill</i>
3,603,937	Multilevel Compressed Index Generation Method and Means	<i>E. Loizides and G. F. Steigerwalt</i>
3,603,938	Drive System for a Memory Array	<i>T. S. Cooper</i>
3,603,942	Predifferentiated Recording	<i>R. F. Heidecker</i>
3,603,943	Pneumatic Record Processing System	<i>P. J. Badum and V. Nejezchleb</i>
3,603,945	Signal Recovery System Utilizing Amplitude Comparison at the Beginning and End of a Bit Period	<i>F. R. Hertrich</i>
3,604,549	Dual Feed Rate Ribbon Mechanism and Supply Cartridge Therefor	<i>A. H. Caudill and W. Goff, Jr.</i>
3,604,704	Stacker for Document Cards	<i>L. L. Amundson and J. M. Rigotti</i>
3,604,765	Self-aligning Bearing	<i>D. H. Babcock</i>
3,604,777	Return Beam Holography	<i>E. S. Mathisen and L. S. Sheiner</i>
3,604,780	Three-dimensional Fiber Optic Display	<i>M. Martin</i>
3,604,800	High Resolution Contact Printing	<i>J. G. Jordan and R. C. Kammerzell</i>
3,604,838	Color Encoder for Compacting and Recording Color Information Obtained by Scanning a Document	<i>J. V. Sharp and D. R. Thompson</i>
3,604,840	Color Encoder	<i>J. V. Sharp</i>
3,604,974	Aperiodic Linearity Correction Circuit for CRT Deflection	<i>D. W. Phillips and G. W. VanCleave</i>
3,605,019	Selective Fading Transformer	<i>J. T. Cutter, J. M. Davies, D. G. Freeman, G. R. Schwarz, and R. VanBlerkom</i>
3,605,038	Population Inversion and Gain in Molecular Gases Excited by Vibrationally Excited Hydrogen	<i>F. T. Byrne and C. F. Shelton</i>
3,605,039	Multicolor Laser Frequency Selector	<i>T. J. Harris and M. Erhard</i>
3,606,515	Method of Manufacturing Wave Shaping Objects	<i>P. M. Hirsch, J. A. Jordan, Jr., and L. B. Lesem</i>
3,606,516	Discrete Aperture Method of Making Synthetic Kinoforms and Holograms ..	<i>P. M. Hirsch, J. A. Jordan, Jr., and L. B. Lesem</i>

3,606,542	Complex-valued Spatial Filter Using Phase Modulation Only	J. P. Kirk, A. J. Lavin, and W. C. Rodgers
3,607,092	Automatic Fluid Sample Apparatus	G. W. Neff and J. E. Tomko
3,607,135	Flash Evaporating Gallium Arsenide	R. K. Gereth, E. M. Hull, and T. B. Light
3,607,253	Tin Base Solder Alloy	J. F. Cain and O. I. Chirino
3,607,268	Process for Providing Aperture-type Film Record Cards	E. R. Skarvinko
3,607,357	Ink Receptive Convertible Films and Process for Their Preparation	H. T. Findlay
3,607,390	Single Crystal Ferrimagnetic Films	R. L. Comstock and D. A. Nepela
3,607,468	Method of Forming Shallow Junction Semi-conductor Devices	J. J. F. Chang and M. B. Vora
3,607,675	Manufacture of Magnetic Particles by Electrodeposition of Iron, Cobalt, or Nickel in Dialkyl Sulfoxide	R. S. Haines
3,607,696	Reversible Electrophoresis and Applications Thereof	B. E. Cornish, E. P. Damm, Jr., and S. L. Phillips
3,607,698	Exitaxial Garnet Films	E. Kay and E. Sawatzky
3,608,892	Article-handling Machine for Use with Electronic Assemblies	E. L. Newman
3,608,994	Holographic Information Storage-and-retrieval System	J. A. McDonnell
3,609,226	Data Compactor	D. R. Thompson
3,609,356	Feedback Controlled Scanning Microscopy Apparatus for X-ray Diffraction Topography	G. H. Schwuttke and L. J. Van Mellaert
3,609,386	Apparatus for Providing Uninterrupted Power to a Load	A. M. Patlach
3,609,393	Bidirectional Dynamic Shift Register	Y. L. Yao
3,609,397	Signal-classifying Circuit	L. F. Zaman, III
3,609,410	Switching Circuits Utilizing Minority Carrier Injection in a Semiconductor Device	J. Saia
3,609,414	Apparatus for Stabilizing Field Effect Transistor Thresholds	P. Pleshko and L. M. Terman
3,609,441	Field-effect Viewing Storage Tube	E. S. Barrekette and H. B. Baskin
3,609,470	Semiconductor Devices with Lines and Electrodes which Contain 2 to 3 percent Silicon with the Remainder Aluminum	L. L. Kuiper
3,609,477	Schottky-barrier Field-effect Transistor	K. E. Drangeid, T. O. Mohr, H. F. Statz, and W. Von Muench
3,609,537	Resistance Standard	A. M. Healy and D. M. Kenney
3,609,539	Self-aligning Kelvin Probe	R. J. Gunther
3,609,555	Digital FM Receiver	R. Van Blerkom, D. G. Freeman, and R. C. Crutchfield
3,609,562	Synchronized Demodulator	P. J. Granata and F. E. Mueller
3,609,565	Extreme Level Detector	R. W. Arnold
3,609,658	Pilot Light Gas Cells for Gas Panels	P. Soltan
3,609,692	Communications Monitor for Data Processing System	R. M. Blake and R. P. Dingwall
3,609,697	Program Security Device	P. R. Blevins, D. W. Terry, and R. H. Thurmond
3,609,699	Automatic Measure Selection for Composer System	W. H. Davis and R. S. Heard
3,609,702	Associative Memory	P. A. E. Gardner, M. H. Hallett, and P. J. Titman
3,609,703	Comparison Matrix	A. Peacock
3,609,705	Multivibrator Responsive to Noisy and Noiseless Signals	B. R. Mercy
3,609,711	Memory Planes Connected in Series to a Power Supply, with Opto- electronic Access	J. B. Gunn
3,609,712	Insulated Gate Field Effect Transistor Memory Array	R. H. Dennard
3,609,723	Piezoreflexive-magnetostrictive Film Transducer	J. K. Alstad and J. R. Wiitala
3,609,724	Random Access Strip Recording Station	G. L. Allison, L. R. Beach, and F. R. Hertrich
3,609,744	Delay Line Character Generator	K. A. Pearson
3,609,745	Symbol Display Apparatus	W. R. Lamoureux
3,609,758	Keyboard Entry Device	D. A. Buesing
3,609,991	Cooling System Having Thermally Induced Circulation	R. C. Chu and U.-P. Hwang
3,610,050	Mechanical Interlock Mechanism for a Carriage Assembly	I. Pejcha
3,610,634	Dictating and Transcribing Apparatus Featuring Record Media Eject Control	F. W. Johnson and E. R. Lloyd
3,610,837	Glass Bonded Ceramic Body for a Magnetic Head	D. W. Brede, M. H. Cook, M. E. Freeman, and H. L. Turk
3,610,902	Electronic Statistical Calculator and Display System	R. A. Rahenkamp and W. R. Stewart, Jr.
3,610,959	Direct-coupled Trigger Circuit	J. A. Palmieri
3,610,967	Integrated Memory Cell Circuit	T. L. Palfi
3,611,019	Gas Panel Apparatus and Method	G. M. Krembs
3,611,062	Passive Elements for Solid-state Integrated Circuits	A. J. Rideout
3,611,071	Inversion Prevention System for Semiconductor Devices	B. Agusta
3,611,074	Corona Discharge Device	H. H. Weichardt
3,611,134	Apparatus for Automatically Measuring Time Intervals Using Multiple Interpolations of any Fractional Time Interval	A. W. McDowell

3,611,171	Integrated Circuit Video Amplifier	J. C. Black
3,611,299	Magnetic Card Data Recorder	R. D. Lindsey and W. L. McDonald
3,611,307	Execution Unit Shared by Plurality of Arrays of Virtual Processors	A. Podvin and M. J. Flynn
3,611,316	Indirect Indexed Searching and Sorting	L. J. Woodrum
3,611,405	Functional Checking of an Optical Channel	D. C. Chang
3,611,557	Method of Producing a Magnetic Transducing Head	A. T. Hardardt, H. C. Schick, and J. H. Westermann
3,611,795	Chip Torque Testing	L. S. Goldmann and L. E. Liander
3,612,239	Typewriter with Ancillary Function Control	J. O. Schaefer
3,612,242	Automatic Ribbon Takeup	J. N. Cassell, V. D. Engle, L. Hymes, and D. C. Roller
3,612,337	Credit Card Batch Carrier	W. H. Harger
3,612,514	Multiple Mode Geneva Drive Mechanism	J. J. Schweihs and K. Hausler
3,612,652	Nonreciprocal Optical Device	M. A. Habegger
3,612,692	Dielectric Film Thickness Monitoring and Control System and Method	R. W. Kruppa and E. S. Ward
3,612,698	Automatic Holographic Wafer Positioning System and Method	E. S. Mathisen
3,612,781	Simultaneous Bidirectional Transmission System	D. J. Da Costa, R. Y. Noguchi, and L. F. Winter
3,612,833	Embossed Card Reading Device	W. M. Davis
3,613,086	Compressed Index Method and Means with Single Control Field	E. Loizides and J. R. Lyon
3,613,228	Manufacture of Multielement Magnetic Head Assemblies	M. H. Cook, W. Nystrom, D. R. Secrist, and H. L. Turk
3,613,856	Antiwear Shield for Continuously Rotatable-type Disc Printer	D. W. Reed
3,614,232	Pattern Defect Sensing Using Error Free Blocking Spatial Filter	E. S. Mathisen
3,614,318	Data Transmission System	U. Klose
3,614,451	Sampling System Utilizing Electro-optic Techniques	J. B. Gunn
3,614,462	Optical Parametric Amplification and Detection System	E. G. Lean, R. A. Myers, and K. S. Pennington
3,614,549	Semiconductor Recombination Radiation Device	M. R. Lorenz and A. H. Nethercot, Jr.
3,614,550	Semiconductor Laser Device with Improved Operating Efficiency	J. C. Marinace and R. C. McGibbon
3,614,560	Surface Barrier Transistor	N. G. Anantha
3,614,608	Random Number Statistical Logic Test System	G. R. Giedd, G. A. Maley, and M. H. Perkins
3,614,609	Go/No-Go Times Circuit Using a Tunnel Diode to Sample a Test Waveform	S. J. Grubel and H. R. Stirling
3,614,635	Variable Frequency Control System and Data Standardizer	A. N. LaPine and J. E. Vaughn
3,614,639	FSK Digital Demodulator with Majority Decision Filtering	H. J. Belman
3,614,677	Electromechanical Monolithic Resonator	R. J. Wilfinger
3,614,736	Pattern Recognition Apparatus and Methods Invariant to Translation, Scale Change and Rotation	J. A. McLaughlin and J. Raviv
3,614,745	Apparatus and Method in a Multiple Operand Stream Computing System for Identifying the Specification of Multitask Situations and Controlling the Execution Thereof	A. Podvin and M. J. Flynn
3,614,756	Magnetic Record with Servo Track Perpendicular to Information Track	R. P. McIntosh and M. Padalino
3,614,830	Method of Manufacturing Laminated Structures	G. Bate and G. W. Brock
3,614,832	Decal Connectors and Methods of Forming Decal Connections to Solid State Devices	D. A. Chance, S. S. Im, J. A. Perri, and J. Riseman
3,615,006	Storage Container	M. S. Freed
3,615,062	Push-in Type Film/Tape Cassette	H. A. Goodman
3,615,070	Centering and Holding Apparatus	R. J. Charlton
3,615,131	Document Processing Machine	A. J. Sable, C. J. Bashe, and R. E. Sandt
3,615,205	Method for the Synthesis and Growth of High Purity III-V Semiconductor Compositions in Bulk	S. E. Blum and R. J. Chicotka
3,615,246	Steady State Etching System	R. T. Lindstrom
3,615,384	Electrophotographic Process Employing Vinyl Bithiophene Polymeric Photoconductors	E. Gipstein and W. A. Hewett
3,615,463	Process of Producing an Array of Integrated Circuits on Semiconductor Substrate	W. N. Kuschell
3,615,464	Process of Producing an Array of Integrated Circuits on Semiconductor Substrate	B. Agusta and R. J. Sahni
3,615,466	Process of Producing an Array of Integrated Circuits on Semiconductor Substrate	R. J. Sahni
3,615,471	Method for Making Optical Masks	J. P. Lenoble, B. J. Albert, F. G. Bochard, J. A. Coquard, and R. A. Norture
3,615,475	Photographic Elements and Process for Producing Vesicular Images	E. R. Skarvinko
3,615,515	Photographic Processing Method Utilizing Electrophoresis and Electrolysis of the Developer	D. J. Lasky
3,615,813	Electrophotographic Layer Cleaning Process and Apparatus	F. R. Clarke and C. E. Herrick, Jr.
3,615,937	Plasticizer Additive to Photoresist for the Reduction of Pin Holes	R. H. Collins and F. T. Deverse

3,615,951	Method for Etching Copper	<i>J. R. Franco, P. A. Totta, and J. F. White</i>
3,615,955	Method for Polishing a Silicon Surface	<i>J. Regh and G. A. Silv�y</i>
3,615,993	Magnetic Ball Production Method	<i>W. K. French</i>
3,616,283	Method of Making Electrical Contact Pins	<i>R. A. Magee and J. S. Scioscia</i>
3,616,361	Photochemical Method of Preparing Cyclobutane Carboxaldehydes	<i>J. M. Picone and R. Srinivasan</i>
3,616,403	Prevention of Inversion of P-type Semiconductor Material During RF Sputtering of Quartz	<i>R. H. Collins and J. S. Logan</i>